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MEMORANDUM FOR: Mark Forman
Associate Director for Information Technology and E-Government
Office of Management and Budget

John Graham
Administrator, Office of Information and Regulatory Affairs
Office of Management and Budget

FROM: Thomas N. Pyke, Jr.

SUBJECT: GPEA Strategy

This memorandum transmits the Department of Commerce's strategy for implementing the Government Paperwork Elimination Act throughout our Operating Units, and addresses those issues identified in your memo of September 25, 2001.

Changes from last year's requirements in compliance with the Paperwork Reduction Act (PRA) collections (GPEA Attachment A) and non-PRA covered transactions (GPEA Attachment B) have been entered into the cio.gov web site.

Attachment

DEPARTMENT OF COMMERCE



Government Paperwork Elimination Act (GPEA) Strategy

October 22, 2001

**DEPARTMENT OF COMMERCE
GOVERNMENT PAPERWORK ELIMINATION ACT STRATEGY**

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DEPARTMENT OF COMMERCE GOVERNMENT PAPERWORK ELIMINATION ACT STRATEGY

OVERVIEW

The Government Paperwork Elimination Act (GPEA) requires that government agencies move from paper-based systems and transactions to on-line interactions with customers and employees such as those increasingly common in the private sector. The Department of Commerce implementation of GPEA encompasses all of the processes, activities and interactions that occur within the Department of Commerce and between the Department and those outside of it, including the private sector, the Congress, and the general public. It is our goal to have as many of these processes and interactions done in an electronic manner by 2003, as funding allows, and where it makes good business sense. Re-engineering and streamlining business processes to utilize current information technologies will enable the Department of Commerce to increase the efficiency of its operations and refocus employee resources on the delivery of products and services. The use of electronic signatures, and developing a Public Key Infrastructure policy, is an integral part of the implementation of GPEA. Emphasis is placed on performing a risk benefit analysis for each business application to determine the appropriate authentication and security needs of the transaction.

In order to help us meet the requirements of GPEA, the Department is undergoing a major initiative to upgrade and standardize the internal infrastructure within the Department. An improved infrastructure is required to support and integrate a new, standardized generation of applications for procurement, human resources management, travel management, real property management, personal property management, physical and information security management, inventory management, and electronic forms and records management across the entire Department. The Department of Commerce currently depends on non-standard administrative systems largely based on paper processes in these program areas. It becomes increasingly difficult, if not impossible, to be responsive to requests for information from both internal and external sources regarding the Department as a whole. With this integrated approach and new tools, Commerce will be able to move quickly to gather and provide requested information that reflects a Department-wide perspective. The infrastructure will allow us to develop and deploy transactional applications that not only interact digitally with our employees, but also process the transactions to completion in an integrated electronic environment. This initiative implements the Department-wide architecture needed for administrative systems, for internal communications, for telecommunications and for Internet Web sites. Given a continued lack of Department-wide administrative systems, the Operating Units will deploy unique applications, raising the overall cost to the Department and exacerbating the problem of sharing and compiling Department-wide data. Our objective is to acquire and implement these capabilities once for the entire Department.

There are many benefits to be gained from implementing GPEA and streamlining internal processes, delivering services and meeting customers' needs effectively and efficiently using electronic resources and modern technology. Streamlined operations will result from the continued and expanded automation of the interface among employees, the internal business processes, and the administrative support processes. Information can flow smoothly and seamlessly through the operation from beginning to end. As a result of streamlining the

operations, we will see reduced operational costs. As the processes are performed electronically, rather than always requiring human interaction, we can save time and money. The redesign and strategic realignment of our processes and the modernization of the way that we do our business will lead to improved efficiency and quality. By not relying on human intervention in data entry and paper handling, we can reduce errors and eliminate duplicate data entry. As employees become more self-sufficient for internal administrative processes and use streamlined business processes, they will save precious time and have the opportunity to bring their professional value-added aspects to the job. This should lead to improved employee morale, as each employee's opportunity to make a contribution is enhanced. The internal management controls and checks that we place in our systems and processes will increase our ability to evaluate and improve those systems and processes. By making the customer interfaces electronic, we will shorten the time required for customer orders and payments. Finally, by spending less time on administrative processes and improving the efficiencies in our business processes, our employees will have opportunities and motivation to develop new products and services, thus making fuller use of the Department's intellectual capital.

In summary, we expect all Department of Commerce business processes supported by Web-based applications will become more effective, more efficient, and more timely. Business processes will be more effective, because all employees (not just those physically present in the office at the time) will be able to perform mission related tasks, even while traveling or telecommuting. Performing mission-critical activities with the right people at the right time will improve the quality of products and services delivered to our customers. Business processes will be more efficient, because electronic work documents will be available instantly as opposed to being photocopied and routed through inter-office physical mail deliveries. Processing and delivering documents electronically will eliminate unnecessary work activities, and reduce the cost of doing business. Business processes will be more timely, because there will be fewer work delays waiting for process workers to return to their office. As a result, "in-box" time will decrease, which will shorten the overall business process cycle time- the elapsed time required to satisfy a customer's request for products and services. A shortened cycle time will speed up the delivery of products and services to our customers.

DEPARTMENT OF COMMERCE STRATEGY FOR MEETING GPEA DEADLINE

The following responds to specific issues to be addressed as outlined in OMB letter of September 25, 2001. As one of the Federal government's most diverse departments, the Department of Commerce affects the lives of all Americans, every day, due to the array of services we provide. We make possible the weather reports that are heard every morning; we facilitate use of the technology that is familiar in the workplace and in the home; we gather the data that are used by the public and private sectors to assist important policy and business decisions; and we support the environmental and economic health of U.S. communities. Given this diversity, this report is organized to provide not only Department-wide strategy but also specific strategies within the Operating Units.

1. Summarize your agency's strategy for meeting the GPEA deadline, and how that is being integrated into its overall plan for transforming the agency to achieve electronic government.

Although the Department has achieved significant success, we remain challenged by the transition from paper-based processes to newer, Internet-based processes. The purpose of this transition (termed "electronic government") is to provide customers with faster and better access to Departmental services while reducing the cost of communications and transactions throughout the Department. The goal of the Department is very clear: to fully support the GPEA legislation by moving our paper processes to electronic processes, and using technology to change the way we process and deliver information and conduct our business in support of our mission, where it makes good business sense.

Electronic Government will transform how the Department of Commerce does its work, from paper-intensive bureaucratic processes to truly electronic ones that take advantage of today's technology. The initiative provides the infrastructure to process transactions electronically and enables us to implement the Government Paperwork Elimination Act, the Clinger-Cohen Act, and other key legislation. As our internal and external customers have access to more and more information, that information must be better organized and more easily accessible. We must switch to a paperless environment, and to do so we need to replace outdated legacy systems with more efficient and streamlined systems, redesign existing systems as necessary, and retire systems that no longer serve a useful function. We must support re-engineered business processes and redesign legacy systems to operate as identified in the IT Architecture Plan, and create links among Operating Units for enterprise-wide systems and standard office automation support tools. We need to enhance and improve the security of our infrastructure to prevent unauthorized access to the information we collect and disseminate. We also must ensure that our employees, customers and stakeholders with disabilities have adequate access to our data and processes.

The Commerce Department continues to face substantial challenges in implementing e-government. As the program continues to unfold and we gain experience, we will consider and incorporate new ideas, lessons learned, and best practices, etc.

Following are some specific examples of Operating Unit plans to implement GPEA and electronic government initiatives.

BUREAU OF ECONOMIC ANALYSIS (BEA)

BEA has developed a three-pronged approach to achieving electronic government and have included three projects in the BEA Strategic Plan and budget initiatives for FY2002 and beyond: Electronic Survey Collection (Government to Business); Electronic Data Interchange (Government to Government and internal Federal government); and Data Dissemination on the Web (Government to Citizen).

BUREAU OF EXPORT ADMINISTRATION (BXA)

BXA has a high priority effort to replace an export control legacy system. BXA's Export Control Automated Support System redesign project (ECASS2000+) will provide for broad-based

electronic dissemination of information as the legacy system is replaced. The ECASS2000+ project will further automate the submission of electronic transactions, documentation, and recordkeeping in order for the agency to achieve electronic government. Simplified Network Application Process (SNAP) has web functionality that allows submission of export licenses online. Electronic Support Documentation (ESD) will enable exporters to submit and reuse documents. These are significant Internet and e-government initiatives that will improve regulatory effectiveness, strengthen industry compliance and further international export control efforts.

U. S. CENSUS BUREAU

The mission of the Census Bureau is “to be the preeminent collector and provider of data about the people and economy of the United States.” Each data collection tool currently in use at the Census Bureau has Government Paperwork Reduction Act approval by the Office of Management and Budget (OMB). In order to ensure compliance with other recent legislation, such as the Clinger-Cohen Act, the Government Performance and Results Act, the Government Paperwork Elimination Act, and the emerging requirements of e-government, the Bureau has implemented a new Information Technology Business Management Process. This new process provides an integrated structure that brings together the Bureau’s Strategic Information Technology Plan, its Operational Information Technology Plan, the Budget, and the individual Information Technology Business Plans (ITBP) prepared by the program areas. In designing this process, Census Bureau Information Technology (IT) managers addressed not only cost, performance measures, enterprise architecture, and security, but also focused on the requirements of GPEA. Though the business management process is still in its early stages, the Bureau’s plan is to evolve, taking a maturity model approach. Within this approach, the overall GPEA strategy will be provided in the Strategic Plan, while execution and project level specifics will be addressed in the Operational Plan and program-level IT business plans. It is important to note that this process has been developed within the significant time and resource constraints involved with the execution of a successful Decennial Census.

The Bureau is currently updating its Strategic IT Plan. Within one of its implementation strategies, this plan will establish a working group responsible for GPEA compliance. This working group will develop implementation guidelines for current and emerging GPEA requirements and will also be responsible for facilitating GPEA time frame compliance. Additionally, the Census Bureau CIO is involved in a number of high-level working groups/committees (e.g. Quicksilver) that will enhance efforts in e-Government, GPEA, and related areas. As is currently the case, all data or information collection plans will continue to comply with the Government Paperwork Reduction Act and must receive OMB approval.

The Bureau has provisionally adopted the following precepts to guide the Bureau’s GPEA related reviews and actions:

- The CIO will maintain oversight of the GPEA compliance efforts by program areas.
- Transactions will be reviewed to ensure that electronic signatures are used only when absolutely necessary and not merely because past practice in paper copy employed signatures.

- Security will conform to the Computer Security Act. The level of security should be commensurate with the level of sensitivity of the transaction.
- Legal counsel will be consulted during the design of each type of transaction. Collection and use of electronic data may raise legal issues, particularly if it is information that bears on the legality of the process, may eventually be needed for proof in court, or involves questions of privacy, confidentiality, or liability.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

In the past year, ITA has initiated steps to transform its value to U.S. businesses and citizens through a strategic approach to electronic government. ITA believes that GPEA is an important tool to achieve electronic government, improve customer service and enhance governmental efficiency through the use of information technology. The ITA strategy will:

- Identify highest-volume and/or most significant transactions (ITA has no major collections as defined by OMB) ; and
- Redesign the business process in which the transactions are embedded, and incorporate technology to enable e-business from start to finish of each transaction process.

ITA's GPEA implementation strategy will utilize two methods to support customer centric government: 1) ITA will unify its information and IT infrastructure; and 2) ITA will simplify significant business processes to build a more effective foundation for transacting business electronically. ITA will approach this second method by addressing transactions with the American public (Government to Citizen); with U.S. businesses (Government to Business); with other governments (Government to Government); and within ITA and other Federal agencies (Internal Efficiency and Effectiveness).

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

Compliance with the Government Paperwork Elimination Act (GPEA) is part of a broader eNIST effort to utilize technology to transform the National Institute of Standards and Technology (NIST) and its core business processes. Paperwork Reduction Act (PRA) and GPEA legislation provide an added incentive to the already strategic imperative for change brought about by rising expectations of NIST's customers and business partners. Building on GPEA, eNIST will enable better service to NIST's government, citizen and business partners by bringing electronic government directly to them; and by reengineering critical business processes to take maximum advantage of online automation. GPEA is helping to further advance NIST's efforts. Information collection plays a key role in helping NIST fulfill its responsibilities within the Commerce Department's Strategic Plan. Although most NIST collections involve very few respondents (on the order of 10's to 100's in most cases), without the ability to collect this information, NIST would not be able to meet its statutory mission and performance evaluation responsibilities under Government Performance Review Act (GPRA). NIST therefore cannot reduce its small Information Collection Budget (ICB) without directly and immediately compromising the Institute's performance.

For every NIST information collection in place or planned, NIST takes steps to decide how each collection fits into their overall business and mission strategies; to consider their strategic IT planning and reporting responsibilities; to consult with their legal counsel for any legal implications arising from an electronic option; and to prioritize activities based on feasibility and net benefit to the agency and its customers.

NIST constantly monitors current information collections to find ways to reduce the paperwork burden in terms of cost and time to their respondents. In large measure the determining factor in using paper is dependent on their respondents' capabilities to communicate electronically. NIST prefers to use electronic, web-based collection mechanisms, and in the few cases where personal privacy is a concern, they plan to use electronic signatures as well.

Many of NIST's current collection efforts reported in this Government Paperwork Elimination Act (GPEA) Strategy are already completed or slated to be complete by 10/2003. Others are already employing electronic means or there are plans in place to go fully electronic on the Web before October, 2003. NIST expects new collection efforts in the future as demands for NIST services continue to increase.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

NOAA is continuing to identify business processes (with internal and external partners) for conversion (and re-engineering) to electronic form, utilizing electronic signatures (and in particular, digital signatures).

NOAA is developing an in-house training capability concerning the Information Assurance (IA) needs of its programs and related resources (e.g., Public Key Infrastructure (PKI)). NOAA is planning for the changes in the Records Management (RM) components of its business processes that will accompany their conversion to electronic form. The National Ocean Service's (NOS) architecture teams for Internet Services and Spatial Data are working together to improve the way NOS does business. The Spatial Data team sees e-government as the method to make spatial data known and available to citizens, businesses and other agencies; the Internet Services team is working closely with the Spatial Data team to create policy and assist in implementation of e-government initiatives. The National Environmental Satellite, Data and Information Service (NESDIS) is working on a project within which a PKI will be created to provide control for data transmission across open networks; as part of that effort, development of the NOAA-level Certificate Policy is now underway.

NOAA is also exploring out-sourcing (as well as in-sourcing) options for transactions within NOAA, with other Federal, State and local governments, with foreign governments, and with private sector organizations and businesses in the US and other nations.

NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION (NTIA)

NTIA's ability to meet the GPEA deadline will depend in large part on the Department's willingness to accept electronic signatures for the documentation required by the grant programs, including grant applications. The Department has indicated that it has no current plans to accept electronic signatures so NTIA's two grant programs may not be able to offer a fully electronic option since hard copy filings will still be required by the Department. The grant

programs represent the major set of transactions with citizens and other Governments (primarily state and local governments, and nonprofit entities). NTIA's spectrum management activities performed for other Federal agencies are almost entirely electronic.

- **Plans for addressing Government to Citizen transactions**

BUREAU OF ECONOMIC ANALYSIS (BEA)

Data Dissemination on the Web: BEA prepares and releases to the public several critical economic estimates, including the Gross Domestic Product (GDP). All of these releases are available electronically from BEA's web site. To enhance customer access to BEA data via the web, in the past year BEA has implemented several database-driven dynamic web applications. These include National Income and Product Accounts tables, Gross State Product, and State Personal Income. BEA is currently working on similar database-driven web applications for the International Accounts and Industry Accounts areas.

U.S. CENSUS BUREAU

The Demographic Directorate in the Census Bureau has tested web-based household surveys but has found that it is not practical due to the developmental costs for a large sample and the limited response using this option. However, greater success has been achieved conducting administrative surveys such as the Schools and Staffing Survey (SASS) and the Library Media Center (LMC) questionnaire. Future plans may include a web-based reporting option for the National Prisoner Statistics (NPS) Program and the Capital Punishment survey component in 2002.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

Providing Government to Citizen transactions is a critical category for ITA. One of ITA's key priorities is the provision of useful trade and export information to foster public awareness of the benefits of international trade. ITA has initiated efforts to simplify and unify the use of the web for citizens seeking trade-related materials, applying for benefits and seeking export services. Two key outcomes have been accomplished related to these methods:

- ITA has coordinated a new unified web portal through **Export.gov**. This action was initiated by the Department of Commerce in September of 2000 in response to repeated requests from the U.S. business community to consolidate Federal export assistance, program, and foreign market information that was spread across multiple agencies and dozens of websites. In addition to Commerce, **Export.gov** has the support of the Small Business Administration, Export-Import Bank, Department of Treasury, Department of Agriculture, the Trade Development Agency, and most of the other 19 agencies in the Trade Promotion Coordinating Committee (TPCC).
- A sophisticated search engine has been procured by ITA and will be operational in November of 2001. In addition to first-rate content search features, the portal will offer advanced personalization and automated content delivery features to its users.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The National Technical Information Service (NTIS) currently has a vibrant Government to Citizen transaction program that has been operational since 1995. The NTIS web-site www.ntis.gov provides citizens with the opportunity to order from over 500,000 publications, CD-ROMS, datafiles and audiovisuals. Citizens can use credit cards (Visa, MasterCard, Discover and American Express) or an NTIS deposit account to make their purchase on-line. NTIS is currently integrating new systems and enhancing others to streamline the purchasing process for its customers to encourage maximum use of its on-line purchasing capabilities. The goal at NTIS is to migrate to a "virtual NTIS" where all products will be warehoused, delivered and paid for electronically through electronic commerce applications. The Comprehensive Ordering Infrastructure (COIN) system provides ready access to online ordering capabilities for the complete NTIS collection of scientific, technical, engineering and business related products.

- **Plans for addressing Government to Business transactions**

BUREAU OF ECONOMIC ANALYSIS (BEA)

Electronic Survey Collection: BEA is planning to offer an electronic filing option for most if not all mandatory and voluntary paper surveys. These surveys collect data that are used in compiling statistics on U.S. multinational companies (MNCs) which provide a comprehensive and integrated data set for empirical analysis of MNCs and of the effects of MNCs on the economies of home and host countries.

BEA has developed an electronic survey data collection system called the Automatic Survey Transmission and Retrieval (ASTAR) system and has implemented the system for the BE-577 (OMB # 0608-0004 Direct Transactions of U.S. Reporter with Foreign Affiliate) and BE-605 (OMB # 0608-0009 Transactions of U.S. Affiliate with Foreign Parent) quarterly surveys. BEA has plans to extend the basic ASTAR system to all appropriate surveys by the GPEA deadline of October, 2003. BEA has also implemented a web-based customer satisfaction survey.

BUREAU OF EXPORT ADMINISTRATION (BXA)

Business to Government transactions are managed by providing access to export information through the use of the Simplified Network Application Process (SNAP). SNAP is a streamlined electronic online application process providing multiple services to the exporter including the submission of electronic forms, acknowledgement of receipt, and the validation of requests. A re-designed SNAP/ESD module will provide support for the submission of all BXA work items unlike the current system that only supports a subset of work items. Integrating SNAP and Electronic Support Documentation (ESD) components into the new ECASS2000+ system will unify transactions throughout the export licensing process.

A majority of the data collection items required in support of BXA work processes are currently contained on the paper form 748P (0694-0088, 0694-0089). In the redesign, the electronic form supporting each work item will only contain those data elements applicable to that work item instead of the current process where every data element contained on the multipurpose BXA-748P form is shown.

Exporters will have the capability of submitting supporting documentation electronically. The ECASS2000+ team identified related collections and is assessing if any new items will be identified as forms are redesigned such as form 748P (0694-0089). Items may include at least twelve current OMB approved collections.

The new system will also simplify and redesign internal and external work processes by automating labor intensive manual processes and workflows currently practiced by license officers, and other BXA personnel. Furthermore, improved relationships with external oversight agencies with provision of more accurate and useful data relative to export control activities will reduce processing time for license applications and commodity classifications through additional/increased electronic submission capabilities.

The ECASS2000+ system will be implemented in a modular fashion with appropriate privacy/security safeguards. A limited PKI function for data transactions on the SNAP/ESD initiative should be completed by the end of FY 02. The pilot includes transactions between business to government and inter-agency transactions.

The use of digital signatures using PKI is being analyzed and conducted in coordination with the Departmental guidelines and standards. PKI for ECASS should be mandatory due to the non-repudiation function of the PKI. The milestone for fully incorporating the PKI functionality by 2003 will be dependent on available funding and policy decisions related to external customer registration costs. Funding availability for PKI will also determine the ability of the Chemical Weapons Convention (CWC) to submit declarations electronically with a digital signature. E-FOIA (Electronic Freedom of Information Act), which may also include the use of PKI as a government to citizen transaction, is a lower priority at this time due to the high priority of the ECASS redesign.

U.S. CENSUS BUREAU

Each program area within the Census Bureau is responsible for reviewing its external interactions to determine if and when electronic information submissions, collections, or transactions are practicable. Each area is also responsible for making a determination on the electronic maintenance of records. Program areas will fund electronic option implementation within their base funding.

In the Economic Directorate, experiences over the past decade have shaped future plans, strategies, and priorities regarding electronic reporting. Future plans will concentrate on developing instruments that provide businesses with functionality that facilitates and eases reporting requirements. The latest technology to protect the confidentiality of information received from respondents over the Internet will be used, including the use of 128 bit encryption and PINs. The Economic Census will offer electronic reporting to 3.5 million business locations, therefore the use of digital signatures would be cost prohibitive.

The Census Bureau's strategic priorities will continue to focus on those surveys that impose the heaviest reporting burden on businesses. This strategy makes optimal use of limited electronic reporting resources while maximizing the tangible benefits accruing to business. Further

expansion of these efforts, however, will be limited to a large extent on the Bureau's ability to adequately fund them. Examples of new and future electronic reporting initiatives are:

- Offering electronic reporting to all 3.5 million participating businesses for the 2002 Economic Census. This initiative is funded in the Economic Census requests for FY 2002 and 2003.
- Expanding and enhancing the functionality and support for the Automated Export System (AES) to meet the requirements of the export trade community and the legislative requirements for mandatory use of AES. The expansion of this program will require additional funding.
- Expanding electronic reporting capabilities beyond the Company Organization Survey, the Annual Survey of Manufactures, the Quarterly Financial Reports program, several Government Division surveys, and one or two other surveys will require additional funding through the appropriation process. A pilot Internet collection project with the monthly Manufacturers' Shipments, Inventories, and Orders Survey (M3) is on-going, but no plans are in place to extend this capability to other surveys unless additional funds are secured.
- Exploration of the use of Extensible Markup Language (XML) and Extensible Business Reporting Language (XBRL) is being conducted. XBRL provides an XML-based framework through which the business information supply chain can use to create, exchange, and analyze financial data. Initial plans call for developing a governmental reporting taxonomy for the Government's Division Single Audit program and prototyping a data dissemination model using press releases.
- Establishment of a 24/7 Internet site to provide assistance to 2002 Economic Census respondents. This site will provide the user with functionality including the ability to get replacement forms, filing extensions, download and submit electronic versions of the census, and to inactively ask and receive answers to questions.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

It is essential that the ITA redesign and enhance client-driven business processes to support the needs of its client base in the new business environment. ITA provides a variety of products and services for American firms. Many of these products and services are requested by ITA's clients through completion of "public-use" application forms. These external customers include:

- Both new and experienced exporters seeking "How to" information and requiring export assistance products/services;
- Individuals and firms interested in export services/resolution of trade complaints by country, region, emerging markets or by industry; and
- Individuals and firms who require relief from unfair trading practices or assistance in applying for a Foreign Trade Zone.

ITA's strategy to enhance client service delivery supports the GPEA mandate for all Executive Branch Agencies to provide electronic access to public-use forms by FY 2003. ITA has

determined from client feedback that utilizing a web-based forms interface is their external client's preference for submitting public information requests for benefits, products and services from ITA. They believe that deployment of simplified business processes with client interactivity and electronic data transmission will enable ITA to meet the customer's need as well as realize significant economies of scale for efficient delivery of client services. ITA has achieved good results by revamping external client processes and internal administrative procedures. These recent technology advances have resulted in several key e-government outcomes during the past year:

- The **Export.gov** project has been selected by the President's Management Council as one of the identified projects to have a government-wide business case developed. This initiative would enable Export.gov to work with partner Trade Promotion Coordinating Committee (TPCC) agencies to streamline export processes and develop online applications to facilitate exporting by U.S. small and medium-sized businesses.
- ITA has improved public access through existing on-line products. Recent technology advances have been applied on a limited scale through pilot efforts in ITA programs with excellent results. For example, the Automated Contact Facilitation Program enabled over 9,000 Small/Medium sized enterprises (SME) firms to locate and use Export Trading Companies and export service providers. The New York and New Jersey Export Services Information Request has delivered information on international marketing opportunities, export financing and export credit assistance to 5,000 SMEs in the New York Metropolitan area in the past year. Trade Development (TD) has implemented an on-line Internet Export Finance Matchmaker site that will aid 2,000 U.S. Firms to obtain sources for export financing. These examples illustrate the tremendous potential offered when technology is harnessed, improvements are made and business processes are redesigned.
- ITA's regulatory functions under Import Administration are currently considering long-term plans to implement electronic document filing, which may include Public Key Encryption and possibly the filing of petitions and other legal documents.
- ITA met with success in redesigning ITA's trade event participation recruitment process as a customer-focused transaction through an ITA Chief Financial Officer/US & Foreign Commercial Services (US&FCS) team effort.
- ITA/US&FCS has initiated the rollout of the BuyUSA.com e-commerce website to enable world-wide access to U.S products and services for purchase by overseas agents, resellers and distributors. Eventually, this system may be a fully automated transaction based system where an overseas buyer of US goods can "point and click" from selection of product through purchase and payment.

These examples illustrate the tremendous potential offered when infrastructure is unified and business processes are simplified. This is why ITA considers e-business based redesign of its business processes to be essential to ensure effective service delivery to ITA's geographically dispersed clientele.

ITA will measure the results of these efforts through ITA-wide performance outcome measures. In addition to the customer value measures previously cited, ITA will monitor and gauge

changes to export transactions through, "Number of Export Transactions Made as a Result of ITA'S Involvement". They will also gauge the effectiveness of customer satisfaction based on a benchmarking analysis that will assess business demand for products and services compared to a similar study completed six years ago.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The Government to Business transactions works like the Government to Citizen process. Businesses have access to the same 500,000 documents and have the same ordering process. Transactions from Government to Business are at a higher order volume than government to citizen. Eighty percent of NTIS customers are in business and industry; providing a vibrant Government to Business interaction. The Government to Business interaction will continue to be a major revenue generator for the NTIS and all future development will ensure that this customer base's system interactions are considered with the goal being to streamline the product procurement process.

- **Plans for addressing transactions with other Governments**

BUREAU OF ECONOMIC ANALYSIS (BEA)

Electronic Data Interchanges: As a statistical agency, BEA is highly dependent on source data from external entities (e.g., federal, state, local and other government data providers). These government-to-government data transfers are achieved through electronic means such as Internet downloads, email and the use of a secure BEA FTP server where BEA's data partners submit and/or retrieve data files. Also, a secure high-speed data link has been established between BEA and the Bureau of Labor Statistics (BLS) for the timely exchange of critical data sets. BEA continues to identify and implement opportunities for the electronic interchange of data between BEA and their data providers/users.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

ITA works closely with other governments on trade policy issues, trade law enforcement, monitoring compliance activities and on site through its global network of commercial officers. ITA also supports efforts of other U.S. Government agencies including the State Department, Treasury and US Trade Representative who are involved with other governments on a day to day basis. ITA has made progress on addressing transactions with other governments through a variety of means.

- The European Commission's Directive on Data Protection went into effect in October, 1998, that would prohibit the transfer of personal data to non-European Union nations that do not meet the European "adequacy" standard for privacy protection. While the United States and the European Union (EU) share the goal of enhancing privacy protection for their citizens, the United States takes a different approach to privacy from that taken by the European Union. The United States uses a sectoral approach that relies on a mix of legislation, regulation, and self regulation. The European Union, however, relies on comprehensive legislation that, for example, requires creation of government data protection agencies, registration of data bases with those agencies, and in some instances prior approval before

personal data processing may begin. As a result of these different privacy approaches, the Directive could have significantly hampered the ability of U.S. companies to engage in many trans-Atlantic transactions. In order to bridge these different privacy approaches and provide a streamlined means for U.S. organizations to comply with the Directive, ITA, in consultation with the European Commission developed a "safe harbor" framework. The safe harbor, approved by the EU in July of 2000, is an important way for U.S. companies to avoid experiencing interruptions in their business dealings with the EU or facing prosecution by European authorities under European privacy laws. Certifying to the safe harbor will assure that EU organizations know that a company provides "adequate" privacy protection, as defined by the Directive.

- ITA has worked closely with other governments to obtain and utilize cost of production data for trade law enforcement efforts under the World Trade Organization (WTO) subsidy code. Cosigners of the code, for some cases, enable ITA's subsidy analysis/accounting staff to use electronic data for analysis. This enables ITA analysts to conduct a more effective analysis since data entry errors and data input is minimized. It is also a more efficient use of their time.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

NTIS does have a government to government transaction program that supports the mission of the NTIS. The NTIS serves our Nation as the largest, central resource for government-funded scientific, technical, engineering, and business related information and receives this information directly from government agencies. Over 200 government agencies, including the departments of: Agriculture, Commerce, Defense, NASA, Education, Health and Human Services, Housing and Urban Development, Interior, State, Treasury, Transportation, Veterans Affairs provide documents that are made available to citizens and business through the NTIS COIN system. International contributors include: Canada, Japan, United Kingdom, the former Soviet Union, Western Europe and former Eastern Bloc countries. NTIS also supports Government to Government transactions with federal, state and local governments who use the system as a research tool for government information.

- **Plans to address internal efficiencies within your agency and transactions within the Federal Government**
 - *Network* – Upgrades to the network infrastructure will create a unified network architecture to enable electronic workplace applications. It will form the very foundation of the Department of Commerce architecture, and allow the connectivity and infrastructure without which no other component of the Departmental architecture can be deployed. It will provide the communications infrastructure needed to allow and support consolidation of the Department's data centers, provide a network infrastructure which will permit network consolidations and will provide an Intranet environment to deploy common user applications throughout the Department, taking advantage of the economies of scale in all cases.
 - *Intranet* – The Intranet will become the basic tool used by all employees for accomplishing their daily tasks. It will make information and processes available to employees for conducting their activities. We will take full advantage of a collaborative work environment

within which employees can search for and retrieve relevant documents and forms and process information. They then can communicate easily and securely with each other to develop project plans, budgets, decision documents, etc. This initiative will provide the software (e.g., portal, directory, search engine, application access control, collaboration tools) and hardware (servers, data storage, firewalls) needed to perform those functions, as well as integration services, maintenance and upgrades.

- *Access Security* – We will create a security access program to ensure integrity of transactions and identity of participants within the Department's environment. Users of Departmental resources, particularly the private Intranet, must be authenticated and the integrity of their work must be assured. This includes the fielding of a digital signature capability for employees to use to "sign" electronic transactions. This initiative deploys security tools and access controls and provides on-going maintenance and upgrades.
- *Electronic Documents/Records Management* – To support the Paperwork Reduction Act as well as GPEA we require the hardware, software and services required to implement and maintain an electronic document and records management system. Such a system will ensure that all internal Department documents (e.g., correspondence, policy, guidance) are electronically published; kept current; categorized; made easily available to management, employees and external customers; and retained appropriately to meet records management requirements. It will also enable employees to collaborate on documents during the creation phase.
- *Web-based Applications* – We continue to work toward deployment of standard, integrated systems for human resources management, procurement, travel, inventory management, correspondence control, budget formulation, etc. These applications will be available to all Department employees and implement the Department-wide architecture for administrative applications. By using an electronic work environment in which our employees collaborate and perform routine tasks efficiently, employees will have more time to devote to performing the mission tasks of the Department and improving customer service. Each of these applications will deliver savings in the areas they address.

BUREAU OF ECONOMIC ANALYSIS (BEA)

With respect to data exchanges between internal BEA units, BEA has adopted standards for databases and has made significant progress in reengineering many key BEA systems to these common database formats thereby simplifying data interchange between program offices.

BUREAU OF EXPORT ADMINISTRATION (BXA)

BXA currently handles transactions within the federal government, business to government, and internally. Data transactions between US Government agencies include: DOD, DOE, STATE, and CIA, reducing paperwork and additional data entry. This allows for the automatic updating of BXA information with respect to inter-agency referrals of export license applications. DOD, DOE and CIA download BXA data to their respective systems and send back responses to this data. The Department of STATE connects directly to BXA's system for transaction updates.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

Demand for on-line interactions within ITA and other Federal agencies has been a priority in ITA over the past year and will continue as a priority in the future. Moving to electronic transactions and electronic signatures in ITA will reduce transaction costs for ITA, other federal agencies and our stakeholders. Transactions are quicker and information access can be more easily tailored to the specific questions that need to be answered. As a result, data analysis is made easier and automation benefits have a positive spillover effect into improving the rest of ITA's business processes. Automation efforts, coupled with ITA's commitment to re-engineer and simplify internal business work processes associated with transactions around the new electronic format may give rise to other efficiencies.

ITA sees GPEA is an important tool in fulfilling the vision of improved governmental efficiency through the use of information technology. This vision contemplates widespread use of the Internet and its World Wide Web, internally and with other Federal agencies for routine transactions of doing business electronically as commercial enterprises are doing. The Federal government can save time and money transacting business electronically. ITA has undergone efforts to simplify and unify the use of the web and e-business for its employees and cite several key outcomes that have been accomplished related to these methods:

- ITA has redesigned ITA's electronic forms program and prepared ITA to migrate to an Adobe platform for forms automation in the first quarter of FY 2002. A client friendly website has been designed to ensure improved service delivery to ITA program units. Public use forms are redesigned and business processes associated with those forms will be revamped and integrated with web activities.
- In order to improve timeliness and quality of Secretarial Correspondence, ITA has implemented a web-enabled tracking system and expanded usage from 4 workstations in the ITA Secretariat to 56 workstations ITA wide. This system uses a revamped ITA correspondence assignment and tracking business process to scan and route incoming correspondence (A & B Priority) to program units. Pilot testing is currently underway to link with Office of the Secretary Exec Sec and ITA plans to expand tracking to other types of written materials in FY 2002.
- In response to requests from ITA's internal clients, the Chief Financial Officer (CFO) staff launched a redesigned CFO-On-Line web which is constantly reviewed and updated to meet ITA program unit needs and offers improved delivery and access of administrative guidance. This web presence enables ITA CFO customers to find the information and guidance they seek or a point of contact to assist them with every administrative matter. Information and guidance is not maintained from the web site, rather it is a set of links to those responsible for the guidance content.
- ITA also intends to develop and expand existing Intranet capabilities and, in partnership with the Department of the Interior's National Business Center, utilize Travel Manager to simplify and automate travel from authorization through reimbursement.

ITA will continue to simplify efficiencies, internally, with the department and with other federal agencies. ITA has created outcome oriented ITA-wide performance measures that become

effective this fiscal year and will assist in measuring success. These measures include internal management measures such as, "Employee Job Satisfaction", and "Clean Audit". We have also defined a measure related to gauging our internal e-government "% of ITA Business Processes Provided Electronically to Internal Customers", to gauge progress towards e-government transactions.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

Internal efficiencies have already been realized and as the systems become more robust additional efficiencies will be gained. The on-line ordering process has greatly improved the efficiency of placing documents at the disposal of the NTIS customer faster and with minimal staff intervention, thereby improving the citizen-government interaction. The on-line process has also improved efficiencies by reducing mailing times of hardcopy documents. As new development and system enhancements are undertaken, the goal is to streamline the product procurement process to not only make the customer interaction more user-friendly but also to realize internal efficiencies through automation. Process reviews will be a part of all future system development/enhancement to ensure the systems maximize efficiency by reducing/enhancing the current procurement process. NTIS has deployed a system that alerts customers via e-mail when new products of interest to them are added to the collection.

2. How is your work to implement GPEA and electronic government related to your agency's on-going work to develop and maintain an enterprise architecture?

Implementation of GPEA and electronic government throughout the Department is compliant with the Department's IT architecture and technical infrastructure. A major driver in the target IT architecture for the Department is moving from a paper-based operation to a fully electronic and automated business.

The Department of Commerce Enterprise Architecture development emphasizes electronic government and those components that support it. Specifically, it defines a framework for deploying secure, standardized systems and applications that maximize end-user participation. Additionally, it encourages the development of Web services that are available, scalable, and provide authentication and non-repudiation capabilities.

The on-going development of the Department of Commerce technical reference model, in conjunction with the IT Architecture plan, provides a blueprint for deploying not only electronic government systems, but also in-house systems. These systems leverage the Intranet to expand capabilities, minimize cost and enable more wide-spread access to services for all members of the Department of Commerce, as well as the external agencies and users that do business with the Department.

BUREAU OF ECONOMIC ANALYSIS (BEA)

All system development complies with BEA's published Information Technology Target Architecture, which is the implementation of core databases in each Bureau program area (National, Regional, International Industry). Bureau software applications are identified,

selected, and developed in a manner that enhances the accuracy, timeliness, and comprehensiveness of BEA outputs.

All software development will be in conformance with BEA's published Software Development Life Cycle Methodology and technology platforms comply with BEA's Software and Database Standards.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

ITA's GPEA plan includes several key elements that were reported in their October 2000 plan; these will continue to remain in the ITA plan until each has been accomplished:

- ITA staff, in conjunction with the CIO, will develop and maintain an enterprise architecture. The effort to implement electronic government is tied to ITA's on-going work to develop and maintain an enterprise architecture.
- ITA's enterprise architecture, performance measurement efforts and GPEA activities are closely interrelated. ITA's enterprise architecture documents the major ITA business processes, which in turn include the transactions that are the targets of their GPEA automation and process improvement efforts; and
- ITA's major program planning documents (ITA Strategic Plan, ITA Budget, GPRA plans) have shifted from an organizational (stove piped) and activity-based presentation to an outcome and process-oriented model, thereby setting the stage for analyzing, unifying and integrating ITA processes across the organization internally, and with external customers and stakeholders/suppliers. The project which generated the new ITA Strategic Plan also identified an expanded list of ITA business processes, which are now being integrated into ITA's Enterprise Architecture.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

The NIST GPEA Plan ties NIST information collections directly to the strategic goals and objectives of NIST's major program areas for the next five years, and conforms to the IT Principles set forth in the NIST IT enterprise architecture. NIST has been in the forefront of the effort to achieve electronic government. They are transforming not only their information collections, but also their business processes, to take advantage of online automation as the preferred business-processing environment. Whether Government to Citizen, Government to Business, Government to other Governments or Agencies, or internal business processing, NIST transactions are done or shortly will be done electronically. NIST provides all interagency reporting and information dissemination activities via a wide variety of electronic means, including direct download and remittance of reports, data, financial data, and databases representing NIST's research and development work. NIST's vast store of knowledge is now available over the Web.

There is an exception. NIST performs the accounting functions for the Office of the Secretary and several other smaller Department organizations. Except for the Office of the Secretary, a CD-ROM in electronic format is provided monthly and yearly to each organization. While this information could be provided electronically, the Office of the Secretary has requested that NIST

use its print capabilities to provide paper printouts for its monthly and yearly accounting reports. There are plans for this to be done in the future in a warehousing format that can be accessed from the Web using a password-protected methodology. NIST plans to investigate if that mode of electronic access will allow an end to the practice of sending accounting reports in paper format.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

GPEA and E-government initiatives are an integral part of the NOAA Enterprise Architecture. Among the cross-organizational domains represented in NOAA's IT Architecture are IT Networking and Shared Telecommunications, Enterprise Messaging, and IT Security. The teams responsible for these domains overlap in membership, both among themselves and with the teams for the Line Office IT Architectures.

The Networking Architecture includes requirements for secure communications. Through these requirements the Networking Architecture integrates with the Messaging Architecture and the Security Architecture. The NOAA Enterprise Messaging Architecture includes security and integrity, particularly in the transmitting of sensitive documents. The Security Architecture supports the security requirements of electronic business within the agency, with other agencies, with other governments, and with private sector businesses and citizens. Although not all electronic business processes will require the strong security services of PKI, some will. Therefore, NOAA has included requirements for PKI in their Security Target Architecture.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The NTIS is currently updating its enterprise architecture to document recently implemented e-government solutions. The current e-government systems support the NTIS strategic and business goals and foster citizen-focused availability to government information. The system life-cycle process requires significant and continual review of requirements, functionality, costs, derived efficiency benefits and how the system will support the mission of the NTIS, and has resulted in NTIS' policy to standardize the hardware and software that supports its systems. This new direction is not fully documented; the NTIS' OCIO has undertaken the initiative to update the enterprise architecture to reflect the current and future e-government initiatives. New development and system enhancements are required to comply with the current and future enterprise architecture model.

- **What efforts are underway to implement customer relationship management (including convergence of on-line and physical citizen interaction and including accessibility standards)?**

The Department of Commerce has actively pursued the use of the Internet for conducting business on-line, providing interactive web sites that inform and educate, as well as providing the capability to apply for fishing permits, export licenses, grants, patents and trademarks, and to complete survey forms.

In accordance with revised Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. § 794d) the Department of Commerce (DOC) has issued an Electronic and Information Technology (EIT)

Accessibility Policy. DOC EIT accessibility policy addresses the effort to ensure that individuals with disabilities who are either Commerce employees using Commerce EIT resources or members of the public seeking Commerce information or services have comparable access to these resources. Comparable access means that the individual with the disability has access to and use of information and data comparable to that of a person without a disability.

All DOC operating units shall comply with the EIT accessibility standards for individuals with disabilities published by the Architectural and Transportation Barriers Compliance Board on December 21, 2000, when procuring, developing, maintaining, or using EIT. If complying with these standards would constitute an undue burden, then requests for relief from the standards must be submitted to the DOC Chief Information Officer (CIO).

BUREAU OF ECONOMIC ANALYSIS (BEA)

BEA obtains customer feedback through several means such as their on-line customer satisfaction survey, joint meetings with other statistical agencies (e.g., Census and Bureau of Labor Statistics), and the BEA Advisory Group -- a group of academic, private sector, and Government executives that make recommendations to BEA senior management.

With respect to accessibility standards, BEA is committed to making all new documents on its web site accessible to everyone and has made several enhancements to accommodate users with accessibility issues. Furthermore, BEA has implemented a link for users to ask questions or make comments on their accessibility efforts.

BUREAU OF EXPORT ADMINISTRATION (BXA)

BXA has made Customer relationship management (CRM) a lower priority due to limited funding. However, BXA offers valuable information and the capability for the public to interact through its web site. In terms of accessibility standards, BXA is addressing compliance with Section 508 of the Rehabilitation Act of 1973 (part of the Workforce Investment Act of 1998) of the FOIA information on the web site. The ECASS2000+ will comply with Section 508 and follow guidelines set forth by the Department of Commerce and the Department of Justice.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

ITA plans to incorporate customer relationship management (CRM) capabilities into their enhanced ITA web presence and the Export.gov portal project. CRM features are already a component of BuyUSA, which is newly-launched electronic marketplace that supports end-to-end automation of the export process.

Accessibility standards are part of ITA's newly published web standards, and existing systems and websites are in the process of being converted.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The NTIS is currently updating its enterprise architecture to document recently implemented e-government solutions. The current e-government systems support the NTIS strategic and business goals and foster citizen-focused availability to government information. The system life-cycle process requires significant and continual review of requirements, functionality, costs, derived efficiency benefits and how the system will support the mission of the NTIS, and has resulted in NTIS' policy to standardize the hardware and software that supports its systems. This new direction is not fully documented; the NTIS' OCIO has undertaken the initiative to update the enterprise architecture to reflect the current and future e-government initiatives. New development and system enhancements are required to comply with the current and future enterprise architecture model.

NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION (NTIA)

NTIA's grant programs are implementing relational databases and network support to manage the entire grant process for each customer from application to closeout. NTIA's legal and IT offices are working together to ensure that all EIT procurements meet accessibility standards.

- **What efforts are underway to implement supply chain management?**

BUREAU OF ECONOMIC ANALYSIS (BEA)

BEA has made good progress in implementing electronic interchange of data internally and with their data providers. As a statistical agency, BEA is highly dependent on source data from external entities (e.g., federal, state, local and other government data providers). These government-to-government data transfers are achieved through electronic means such as Internet downloads, email and the use of a secure BEA FTP server where BEA's data partners submit and/or retrieve data files. Also, a secure high-speed data link has been established between BEA and the Bureau of Labor Statistics (BLS) for the timely exchange of critical data sets. BEA continues to identify and implement opportunities for the electronic interchange of data between BEA and their data providers/users.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

NTIS currently provides supply chain management through its point of sale systems. The NTIS mission supports supply chain management by being the central source for procuring U.S. Government scientific, technical, and business information. The products that NTIS makes available to its customers originate in over 200 government agencies and are obtained, maintained and purchased through NTIS. The current and future enterprise architecture is consistent with the supply chain management process.

- **What efforts are underway to implement enterprise information management?**

The Commerce Standard Acquisition and Reporting System (CSTARS) is an enterprise-wide procurement system that is being deployed throughout the Department's Operating Units.

CSTARS will provide a commonality of processes, formats and data, with seamless integration with financial systems. The objectives of CSTARS are to:

- Standardize business practices across all Operating Units;
- Support an integrated planning, programming and budgeting process;
- Lower purchasing costs;
- Reduce administrative burden; and
- Leverage information technology investments.

BUREAU OF ECONOMIC ANALYSIS (BEA)

All system development complies with BEA's published Information Technology Target Architecture, which is the implementation of core databases in each Bureau program area (National, Regional, International Industry). Bureau software applications are identified, selected, developed in a manner that enhances the accuracy, timeliness, and comprehensiveness of BEA outputs.

BUREAU OF EXPORT ADMINISTRATION (BXA)

In the area of enterprise information management, ECASS2000+ incorporates a web-based enterprise. The first version of BXA's enterprise architecture is expected mid-year 2002. Streamlined processes such as correspondence tracking and requirements management have been instituted as well.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The mission of the NTIS is to consolidate information from over 200 agencies into a one-stop electronic environment. This is the premise behind e-government and NTIS has been accomplishing this since 1995. The NTIS COIN system is a transactional system that provides access to over 500,000 documents using an e-commerce application that allows for on-line purchasing of these documents. NTIS has centralized the document inventory in the Storage Text and Retrieval (STAR) system that collects, analyzes and catalogs all documents available through CISPUB. The Automated Document Storage and Retrieval (ADSTAR) system stores the images of these documents in TIFF or PDF formats and makes them readily available for on-line purchase. The emphasis at NTIS is not only to streamline current systems like ADSTAR but also to convert the agency from several distinct systems to a single system with multiple modules that provides integration into the current and planned enterprise architecture and promotes an open systems environment. The modules will share enterprise information, thereby reducing data redundancy that now exists and improving enterprise information management.

3. How are you using information technology and on-line processes to unify and simplify transactions?

The Department of Commerce is making the use of FedBizOpps.gov mandatory for all Contracting Offices by October 31, 2001. This is well ahead of the President's Management Agenda that directs the use of this single e-procurement portal by the end of 2002.

BUREAU OF ECONOMIC ANALYSIS (BEA)

For each survey to be implemented electronically, BEA reviews the data collection requirements and seeks to simplify the process (for both the customer and BEA) through the use of on-line data checks. Furthermore, they offer one page on their web site that allows a BEA respondent to access all on-line forms.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

ITA will continue to simplify Government to Citizen business transactions. ITA has integrated their delivery channel for citizen-based information through the web portal effort. ITA has also developed outcome-oriented ITA-wide performance measures that become effective this fiscal year and will assist in measuring success. These measures include customer value measures such as, "Level of Awareness and Understanding of ITA's Products and Services"; "Customer Perception of Portal Ease of Use"; and "Customer Perception of Ease of Access to Export and Trade Information and Data". Another ITA-wide measure, "% of ITA business Processes Provided Electronically to External Customers", will gauge progress towards the simplification of e-government transactions.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

NIST has included in its GPEA plan information on four internal projects that will substantially reduce paperwork within their business processes. They include: Travel Manager, Commerce Administrative Management System (CAMS), Commerce Standard Acquisition Reporting System (CSTARS) and Electronic Workflow and Approval via Digital Signatures (E-Approval). NIST is implementing Commerce Department-wide solutions, i.e., Travel Manager, CAMS and CSTARS projects, for travel administration, accounting and acquisition management respectively, while E-Approval is a NIST developed project that focuses on automating the electronic routing and approval of administrative action documents using digital signatures applied to e-forms to certify approval.

Having completed an extensive pilot implementation, NIST is deploying E-Approval NIST-wide. We plan to extend the process of adopting electronic routing and digital signatures to interactions with other agencies, commercial suppliers, and collaborators as part of a broader public key infrastructure (PKI). We feel strongly that such a solution can eventually be scaled to include all of the Commerce Department.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

Both the National Ocean Service (NOS) and National Marine Fisheries Service (NMFS) have a number of "one-stop shopping" projects planned that will improve service delivery to businesses, citizens and other agencies. For example, Fisheries plans to enable fishermen to obtain permits for regulated fisheries over the web from a single portal and is also developing a system to support electronic rulemaking so that the public can provide comments on proposed rules using the web. NOS is working on projects that will enable systems for marine transportation one-stop shopping, grants applications on line, and a data portal with environmental, coastal management and hazmat emergency response data. NOAA's

Acquisition Office is already using the Government's FedBizOpps single e-procurement portal to access notices of solicitations over \$25,000, ahead of the President's Management Agenda target date of the end of 2002.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The NTIS on-line ordering service is a robust and mature system that has processed online transactions since 1995. The COIN system consists of comprehensive and reliable database of bibliographic NTIS product information; a robust suite of software tools and access methodologies; and online ordering and delivery mechanisms designed to promote greater customer exposure to NTIS products. The current process allows a citizen or business to order over 500,000 products through a simple on-line ordering process. The on-line process is backed by several systems that support the storage of document images, document inventory (includes media types available, page counts and pricing information), customer database, ordering processes and accounts receivable processes. NTIS is currently reviewing new technologies and developing/enhancing its current suite of systems to provide its customer base with the highest level of customer service through robust automated systems. NTIS is currently reengineering the NTIS web-site (www.ntis.gov) and backroom applications to provide an integrated e-commerce system that will enhance the services NTIS provides to its customers and provides for a sophisticated, simplified, and user-friendly customer interaction. The new system will be fully integrated into the NTIS enterprise architecture and will utilize open architecture technology design.

NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION (NTIA)

NTIA accepts grant applications and reports from grant recipients on-line (with hard copy provided separately where signatures are required). Virtually the entire spectrum management process for other federal agencies is now conducted electronically.

4. What methods are you using to ensure the most beneficial projects are prioritized for implementation?

Commerce information technology (IT) capital planning and investment control process is built on a foundation of strategic and operational IT planning that is integrated with processes for the selection, control, and evaluation of IT investments. The process includes linkages throughout to IT architecture, IT security and privacy, IT accessibility, electronic government, and other domains of IT management responsibility as well as linkages to the Commerce strategic planning, budgeting, and acquisition processes. This capital planning and investment control process is in support of the Clinger-Cohen Act of 1996 and the Paperwork Reduction Act of 1995; Computer Security Act of 1987, Government Information Security Reform Act of 2000, and Presidential Decision Directive 63 of May 22, 1998, *Critical Infrastructure Protection*; the Government Paperwork Elimination Act of 1998; the Rehabilitation Act, amended 1998; Office of Management and Budget Circular A-130, *Management of Federal Information Resources* of November 30, 2000, and Executive Order 13011 of July 16, 1996, *Federal Information Technology*; and other related legislation and Federal guidance.

The process begins with a request from the Department's Chief Information Officer (CIO) for operating units to develop strategic IT plans. Strategic IT plans provide a framework for discussion and an opportunity for operating units to focus on the strategic use of IT resources to improve program delivery. Strategic IT plans also lay the groundwork for development of operational IT plans and documentation to support budget year IT initiatives. Strategic IT plans establish over-arching, operating unit-wide IT goals, such as the development of architectures, strategic use of electronic commerce, and development of IT security and privacy strategies. The plans include financial information in the format of OMB Circular A-11, Exhibit 53. This provides an overview of the operating unit's IT portfolio and provides consistency with the budgeting process.

Operational IT plans are due in the fall and describe specific operating unit plans for IT activities for the coming fiscal year. The operational IT plans are based on OMB Circular A-11, Exhibit 300. This provides continuity with the budgeting process and a consistent set of documentation, ensuring that issues such as developing systems within the context of an architecture and IT security and privacy are considered on an on-going basis. At the point of the operational IT plans, the Exhibit 300 documentation should be well refined, identifying specific schedules, acquisition plans, and performance measures. The timing of the operational IT plan is intended to put the focus on the coming fiscal year and to promote better coordination and integration with development of Annual Performance Plans required by GPRA.

The Commerce IT Review Board (CITRB) advises the Secretary and Deputy Secretary on critical IT matters, ensuring that proposed investments contribute to the Secretary's strategic vision and mission requirements, employ sound IT investment methodologies that comply with Departmental systems architectures, and provide the highest return on the investment or acceptable project risk. This includes recommendations for approval or disapproval of funding for new or base investments as part of the Department's budget review process. Systems selected for review meet one or more of the following criteria: systems meriting special attention due to their sensitivity, mission criticality, or risk potential; Department-wide systems; systems where resources are shared between operating units and/or the Department; and systems with life cycle costs over \$25 million. Those applications/systems identified in the Operating Unit's GPEA strategies rarely fall into this investment criteria.

The CITRB is chaired by the CIO and is composed of the Chief Financial Officer, the Director of the Office of Budget, the Director for Acquisition Management, the Director for Financial Management, the Director for Human Resources, the Deputy CIO, and CIOs from the National Oceanic and Atmospheric Administration, Census Bureau, National Institute of Standards and Technology, and International Trade Administration, and, on rotating basis, two other operating unit CIOs. Currently, the National Telecommunications and Information Administration and the Bureau of Economic Analysis are represented.

As part of its charter, the CITRB makes recommendations for continuation or termination of projects under development at key milestones or when they fail to meet performance, cost, or schedule criteria. The CITRB now meets monthly to assess key projects in control reviews. The CITRB control and evaluation review process assumes that operating unit processes for the control and evaluation of major IT investments will generate the principal documentation for CITRB consideration.

BUREAU OF ECONOMIC ANALYSIS (BEA)

The initiatives for electronic survey collection, electronic data interchange, and data dissemination on the web received high ratings from BEA's Information Technology Executive Steering Committee (ITESC) comprised of senior level executives including Director, Deputy Director, and CIO.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

ITA CFO and program staff, in conjunction with the CIO, will conduct on-going evaluation of information collections from the public subject to the Paperwork Reduction Act of 1995 for GPEA implications:

- ITA CFO and program staff, in conjunction with the CIO, will establish a priority ranking for simplifying key business processes surrounding selected ITA information collections. For example, ITA would consider a transaction involving 5,000 *plus* respondents before it automated a business process involving 6 respondents.
- ITA CFO and program staff will determine whether or not an electronic submission option is currently available. This includes efforts to:
 - ◆ Assess benefits and cost/risk required for electronic transactions;
 - ◆ Identify any statutory, practical or other barriers; and
 - ◆ Identify and establish a completion date for offering fully electronic reporting option for collections.
- ITA CFO and program staff will determine whether or not transactions require a signature. ITA currently has seven public information collections that require a signature.
 - ◆ Assign high electronic implementation priority for collections with the most transactions annually and greatest impact on customers; and
 - ◆ Assess the required level of authentication needed and assess whether further risk mitigation is required.
- Evaluate transactions which exchange or disseminate information with/to the public and work with individual ITA unit staff to assess and redesign necessary business processes to enable electronic collection and exchange of information.
- Use E-Governance Board to assess net benefits, barriers to new IT initiatives and outline rollout schedules. Although ITA's current priority projects are on schedule, ITA intends to use its E-Governance Board to ensure the most beneficial projects are set as priorities for implementation and rollout are realistic related to budgets and program priorities. The Board is being established to provide oversight for the ITA web presence and function as the Information Technology Review Board (ITRB).

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

National Marine Fisheries Service (NMFS) has prioritized its projects based on overall potential impact on the public using the number of respondents involved and on the strategic role the transaction plays in accomplishing the NMFS mission. National Ocean Service (NOS) has chosen areas that can be improved by automation such as the turn-around time for grants, immediate data access for hazmat response, and increasing the frequency of updates to widely used charting products. National Environmental Satellite, Data and Information Service (NESDIS) has prioritized emergency services to the public, implementing an electronic Vessel and Aircraft Beacon Registration process that gives individuals and the ship, boat and aircraft industry an electronic means of registering emergency beacons.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

NTIS utilizes a Senior Management Board consisting of the Director, Deputy Director, CIO, CFO and the Associate Directors to review and prioritize system development and enhancements. The board meets on a quarterly basis to set priorities and review the previous quarters activities to ensure all development is on schedule and within budget. As a fee-for-service organization the board defines "beneficial projects" as those that provide maximum support to its customers and supports the strategic business goal of generating revenues for the agency. The NTIS Project management life cycle feasibility, planning and implementation stages ensure that all IT projects support the NTIS business goals, undergo cost, schedule, resource, risk and technical review and then are managed to successful implementation.

- **Which initiatives appear to have the highest net benefit and why? Which initiatives are not practicable and why?**

BUREAU OF ECONOMIC ANALYSIS (BEA)

BEA has established the date for completion for all of its on-line surveys in the order with which they rank them in terms of net benefit to the organization. The criteria for this prioritization are many, but mainly are due to the duration and/or start of the reporting cycle, the number of respondents, the simplicity of the survey form, the plans for survey redesign, etc. For example, BEA has ranked its quarterly surveys the highest in priority since they have such tight deadlines and would benefit most from having more forms filed electronically. Conversely, BEA's benchmark surveys, conducted only every 5 years, are generally ranked lower in priority for electronic implementation due to their lower return on investment.

BUREAU OF EXPORT ADMINISTRATION (BXA)

The ECASS2000+ project will have the highest net benefit due to its mission critical nature. The redesign effort will support BXA's Internet services vision to implement comprehensive Electronic Information Dissemination and Internet practices. Additionally, the data will be collected online using the same integrity and functional standards as the current system forms. Many information collection items in the BXA GPEA plan are related to the redesign of ECASS and will provide BXA with more efficient business processes as they are further automated.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

A number of non-electronic processes in the NOAA GPEA plan are not scheduled to be implemented because it is not practicable. For instance, at the National Climatic Data Center (NCDC), some existing records are in microfilm format and cannot be converted economically. There are some Fisheries PRA collections that require personal interaction in the form of interviews or in the case of experimental fishing permits, where a call-in option is less burdensome.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The on-line web ordering system, COIN is the backbone of the NTIS Government to Citizen, Government to Business, and Government to Government operation and as such has the highest net benefit to the NTIS e-government initiative. This system is the window to the scientific, technical and business related information produced by over 200 government agencies and centralized at the NTIS for procurement by citizens and businesses. COIN integrates data from NTIS operational legacy systems supporting inventory control, order processing, electronic document storage, and accounting processes and is central to NTIS's mission and fulfillment of its strategic direction. The system supports the strategic and business goals of the agency and supports the agency with the revenues it generates from the sale of its products. The NTIS mission is very focused and the initiatives undertaken are to derive the highest net benefit to the agency. As a fee-for-service agency, the NTIS systems must support the revenue generation mission of the agency.

- **What cross-cutting barriers to implementation have you identified?**

The use of electronic signatures, in particular Public Key Infrastructure (PKI) is a barrier in that we have not adequately identified through business process engineering the appropriate methodology for electronic signatures. Until this is accomplished, budgets are not being developed and the implementation will go unfunded.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

ITA will continue to conduct risk analyses and identify the relative value of the type of transaction being automated and factor that against the costs associated with implementing technological and management controls to mitigate risk. As stated by OMB, "electronic signatures are least necessary in very low value transactions and need not be used unless specifically required by law or regulation. Where authentication is necessary, the method of electronic signature should be appropriate to the level of risk." ITA will also consider the use of E-sign technologies and take into account the risk of intrusion. ITA will assess the probability of a security intrusion on each type of transaction based on the priority of redesigning the business process for each PRA collection identified and on the benefit to the potential hackers and their knowledge that the transaction will take place.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

NIST is in the process of developing a strategy to define the components of their eNIST “to be” IT architecture and the infrastructure that needs to be in place to support eNIST. The NIST IT Architecture will be the backbone of the future eNIST environment. eNIST broadly encapsulates customer and collaboration based applications in forward facing technologies. Part of the eNIST vision is to provide IT as an extension of the NIST workplace as the workforce becomes less physically bound to the NIST campus. This eNIST workplace requires an organizational environment that enables all end-users to consistently interact in a unified and streamlined fashion. The primary issue is deploying the vision of E-NIST in a methodological fashion with proper leadership to support it.

To accomplish the eNIST vision NIST has established a new IT Management Review Board (ITMRB) with the responsibility to review and prioritize all future centrally supported IT investments; that is, to manage their IT investment portfolio. They are currently in the process of drafting ITMRB investment review policies and procedures and a tailored System Development Life Cycle (SDLC) management process for all centrally managed automated information systems at NIST. By moving aggressively to implement these management controls NIST is ensuring that beneficial projects are prioritized to follow the eNIST strategy for deployment.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

Since many of NOAA’s plans depend on electronic signatures, the evolving PKI/E-sign infrastructure is a major barrier to the implementation of these efforts. The National Environmental Satellite, Data and Information Service (NESDIS) has an initial project within which PKI will be created to provide control for data transmission across open networks. That experience will be used to build on future PKI applications.

Work going on in various parts of NOAA has, however, run ahead of the Migration Plan and is included in the discussion under NOAA’s strategy for meeting the GPEA deadline (response #1).

A NOAA-level Certificate Policy (CP) is being developed, modeled on the CPs of agencies preparing for cross-certification with the Federal Bridge. The intent is that this CP will serve most or all needs for Certificate Authorities within NOAA, assuring interoperability within NOAA, with other elements of Commerce and with the Federal Bridge and its community. NOAA expects to have its CP ready by FY02 Q2, and a Certificate Authority under this CP in operation by FY02 Q4, for inter-operation with the National Aeronautic and Space Administration (NASA) and one or more NOAA/NASA contractors.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

The NTIS has not met any IT related crosscutting barriers while implementing their systems. As a Fee-for-Service organization, the major barrier to system implementation is funding, since the NTIS funding stream is based on agency generated revenues.

NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION (NTIA)

As noted above, the chief barrier to implementation is the Department's inability to accept electronic signatures. By the end of FY 2002, both of NTIA's grant programs will be capable of handling the entire grant process electronically except that hard copies will still be required by the Department.

5. Are any of your priority projects behind schedule? What actions are you taking to assure that they are completed on time?

Only one Department of Commerce operating unit reported projects that as being behind schedule. This is attributed to centralized CIO oversight on IT projects and tracking and monitoring projects on a routine basis.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

Both project plans submitted by NOAA 's Office of Finance and Administration (OFA) are behind schedule.

Grants On-Line

NOAA 's Grants Application Process ("Grants On-Line"), an initiative to consolidate NOAA 's three existing Line Office Grants Applications Systems, is on hold because once again it has not been funded in the budget process for FY03.

A NOAA level working group team includes personnel from each of NOAA 's Line and Staff Offices, whose goal is to develop a single NOAA-wide electronic grants system. NOAA has been an active member, for the past four years, of the Inter-Agency Electronic Grants Committee (IAEGC). The IAEGC is tasked to develop standardized data fields that will allow for the sharing of data between agencies. All 26 grant making agencies are working to develop the IAEGC 's tool kit, with NSF and NIH as the lead agencies. The tool kit will enable each agency to access Organization and Professional Profiles of existing grantees. The schedule for completing that action is early 2nd quarter of FY02.

The IAEGC 's action will ensure that NOAA 's effort can go forward if it is funded. As a first step, NOAA, EDA, and NIST received a Pioneer award to assist in developing an Organizational Profile for grantees that receive financial assistance funding from the Department of Commerce. Once the IAEGC 's tool kit is developed, NOAA 's implementation of a consolidated, NOAA-wide grants on-line initiative can go forward. NMFS, NOS, OAR, and the NOAA Grants Office are continuing to improve their individual grants applications systems, but the concern is that without funding now, NOAA will not be ready when the IAEGC work is completed in FY02.

CSTARS

NOAA 's Acquisition Management Division and Administrative Support Centers are scheduled to implement an automated application that supports electronic transaction interfaces (CSTARS).

The deployment of this application tool is scheduled for mid FY02 but funding is again an issue since there is none identified in the FY02 budget for this initiative.

To assure that this initiative will begin, 91 licenses for MicroSoft Office 2000 (standard) have been purchased for NOAA 's Acquisition and Grants Office in Silver Spring and the Administrative Support Centers in the field. This will enable procurement personnel and their internal and external customers to exchange documents that are part of a procurement action and contract award process. However, without funding for this project, further EDI implementation will be delayed.